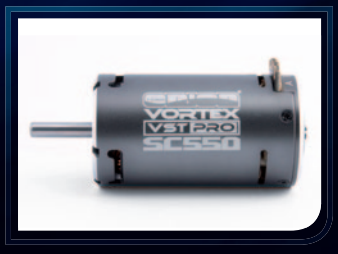
ENGLISH

TEAM ORION



2012 NEWS

THE NEW TOUCH CHARGER TECHNOLOGY

- 3" 400X240 COLOR TOUCH SCREEN
- FOR LIPO, LIFE, LIION, NIMH, NICD & PB BATTERIES
- DUAL INPUT 11-18VDC AND 100-240VAC
- CHARGE SETUP ASSISTANT
- USER FRIENDLY TOUCH SOFTWARE

The Advantage Touch charger is a new generation of high tech charger from Team Orion. Equipped with a touch sensitive color LCD screen and specialized touch software, it's a brand new experience in the field of battery charging.

SPECTRA

240x400 PIXEL
TFT COLOR TOUCH SCREEN

SPECTRA TFT-LCD Color Touch screen

On a device such as this one, the screen is a very important part of the charger. The 3" 400x240 color TFT-LCD display combined with our specialized ATTS touch software offers an exclusive "touch" experience for the user. Selected high grade components ensure a flawless and intuitive experience, the information is clearly displayed on the screen and the touch screen precisely registers the user input. Thanks to it's "touch" input, the charger reaches new levels of usability and interactivity.

ORI30185 EU-Version
ORI30186 UK-Version
ORI30187 USA-Version
ORI30188 CH-Version
ORI30189 JP-Version
ORI30190 AU-Version

HPC

HIGH PRECISION
CHARGING PROCESSOR

HPC High Precision Charging Processor

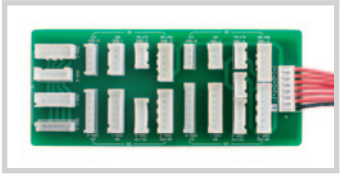
It's important that the charger gives the battery a complete charge, no matter the type and original status of the battery. Through extensive R&D we have found the best charge and discharge profiles to ensure a safe and reliable charge and discharge, time after time. The high precision charging circuitry manages the charge and discharge with unprecedented levels of accuracy, delivering optimal battery performance charge after charge.

ATTS

ADVANCED TOUCH
TECHNOLOGY SOFTWARE

ATTS Advanced Touch Technology Software

The ATTS software was specifically designed for the Advantage charger, its interface offers both ease of use for beginners and customizability for experienced users. All of the information is clearly displayed on the high-resolution color screen, this means that having to read lengthy user manuals is a thing of the past, the charger offers a very intuitive experience. To make things even simpler for users with limited knowledge, a setup assistant helps the user to setup to charger.



The new 4-in-1 XH, TP/FP, EH and HP/PQ balancing board is included with the charger.

Features

- Touch screen charger with 400x240 pixel TFT-LCD screen.
- Charges 1S to 6S LiPo, LiFe and LiIon batteries, 1 to 15 cell NiMh/NiCd batteries, 2 to 20V lead batteries
- Charge current 0.1-5A (50W max)
- Discharge current 0.1-1A (5W max)
- Dual power input, 100-240VAC, 11-18VDC
- Innovative ATTS Touch optimized software
- High precision HPC charge system
- Setup Assistant
- Graphic data display
- Functions : charge, discharge, cycle, storage, balancing
- Balance only function mode
- Switchable balance function
- External balancing board for XH, TP/FP, EH, HP/PQ type connectors
- TRX, Deans, Tamiya, BEC, Futaba and crocodile clips charge cables included
- Multi-language interface
- Optional temp probe available for temperature monitoring
- Adjustable delta-peak
- Switchable trickle charge
- Compact size

Packaging contents

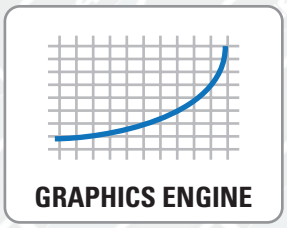
- Advantage Touch Charger with power cord
- TRX, Deans, Tamiya, BEC, Futaba and crocodile clips charge cables
- USB cable
- 4-in-1 Balancing Board (XH, TP/FP, EH and HP/PQ)
- User manual and Quick Start user guide

Technical Specifications

Input	11-18VDC / 100-240VAC
Battery types	NiMh/NiCd 1-16 cells LiPo/LiFe/LiIon 1-6 cells Pb 2-20V
Charge current	0.1-5A (50W max)
Discharge current	0.1-1A (5W max)
Size	L170xW158xH45mm
Weight	662g

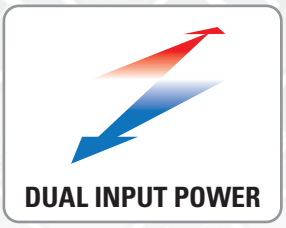
Advanced Balancing

The Advantage Touch charger is equipped with a lithium battery balance function. This function enables you to check the status of your lithium batteries and if required it can balance the cells without having to use the charge or discharge functions of the charger. A graphic display and data such has voltage and IR for each cell are displayed on the screen indicating their current status.



Graphics Engine

Thanks to its advanced software and hardware capabilities, the charger can display the current charge and discharge status with a graphic. Graphics give a visual reading of data which can help you better visualize the current state of the battery. You can check the battery charge and discharge voltage curves which may indicate eventual inconsistencies with the battery function.

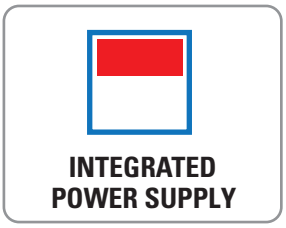


Dual Power Input

The Advantage Touch charger can use AC and DC current as a power source. This means that you can power the charger from a 100-240VAC mains power outlet or a 11-18VDC power source (like a car battery). This extra flexibility means that you do not need two different charger or to carry a power supply around with you.

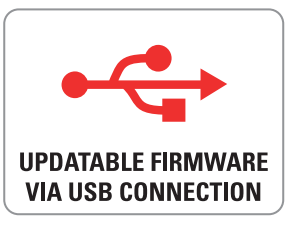
Setup Assistant

Adjusting the correct parameters into the charger is not an easy task for those that are not familiar with charging batteries. To help out these users, the Advantage Touch charger features a setup assistant which allows you to easily setup the charger parameters by following the on-screen information.



Integrated Power Supply

The Advantage Touch charger features a compact sized case, even though, we have managed to integrate and AC/DC power supply into the case. The main advantage of this is that you don't need to buy a separate power supply along with the charger and you can plug the charger directly into a mains power outlet.



USB Port

The charger is equipped with a mini USB port. Thanks to this port, you can connect your charger to a computer and update its software. Updated software can improve the capabilities of the charger, it also helps it maintain its original value since you can always have the latest functionalities. Software updates can be downloaded from our website www.teamorion.com/touch.

Multi-Language Software

To improve the user-friendliness of the Advantage Touch Charger, we have translated the software in different languages. The charger interface is in English Language by default and it can be changed to German, French, Italian, Swedish and Japanese. Translated software can be downloaded from our website www.teamorion.com/touch.

THE EVOLUTION: CARBON PRO WTS

INNOVATIVE WEIGHT TRANSFER SYSTEM

CARBON PRO 90C LIPO TECHNOLOGY

OFF-CENTER CELLS ALLOW BETTER WEIGHT POSITIONING

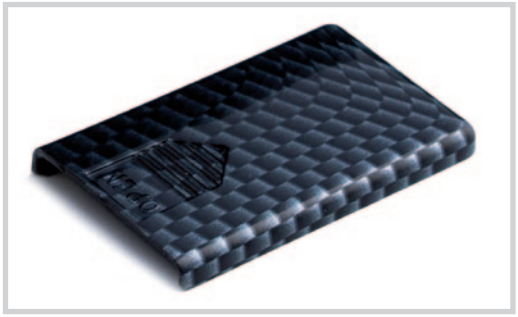
WEIGHTS MADE OUT OF ALUMINUM (22G) OR BRASS (69G)

COMPACT SIZE AND LIGHTWEIGHT

Team Orion was the first company to encase LiPo cells inside a plastic hardcase to protect them from impacts and render them more user friendly. Now we have evolved that design once more and bring you the WTS "Weight Transfer System".

In many of today RC race cars, weight distribution is an important factor in the setup of the car and racers move the battery forwards or backwards to change the weight distribution. The problem is that the size and disposition of current batteries limits the effectiveness of this setting. To remove this limitation, we have developed a new battery case that uses shorter cells and is equipped with three compartments to fit weights. Thanks to this you can not only modify the position of the battery, but also its total weight and the disposition of that weight within the battery case.

ORI40510 Carbon Pro WTS Weight Set



ORI40511 Carbon Pro WTS Battery Cover

Features

- Newly designed carbon look case
- Compact size and lightweight
- Latest 90C LiPo technology
- 4000mAh capacity, ideal for off-road use
- Off-center cells allow better weight positioning
- 3 weight slots for maximum adjustability
- Weights made out of aluminum (22g) or brass (69g)
- Adjustable weight from 204g (w/o weights) to 411g (w/ 3 brass weights).
- Connectors located at the front and rear of the battery for easy connection
- Switched battery polarities between front and rear to avoid misconnections

ORI14053 Carbon Pro WTS
4000mAh 7.4V 90C
w/ Weight Set

3S LIPO BATTERIES THE EASY WAY!

- 3 CELLS FOR UNPARALLELED PERFORMANCE
- COST FRIENDLY LIPO
- 25C DISCHARGE RATE
- 3200, 3500 AND 4300MAH CAPACITY
- ALSO AVAILABLE WITH THE UNI PLUG SYSTEM

With the new Rocket Sport 3S batteries, Team Orion now offers high performance with a friendly price for everybody. Upgrading to a 3S LiPo battery is the easiest way to drastically improve your car's performance!

3200mAh | 11.1V | 3S

Runtime
Power

Uni Plug System	Rocket Sport 3S, 11.1V 3200mAh	ORI14199
TRX	Rocket Sport 3S, 11.1V 3200mAh	ORI14198
Deans	Rocket Sport 3S, 11.1V 3200mAh	ORI14197
Tamiya	Rocket Sport 3S, 11.1V 3200mAh	ORI14196

3500mAh | 11.1V | 3S

Runtime
Power

Uni Plug System	Rocket Sport 3S, 11.1V 3500mAh	ORI14195
TRX	Rocket Sport 3S, 11.1V 3500mAh	ORI14194
Deans	Rocket Sport 3S, 11.1V 3500mAh	ORI14193
Tamiya	Rocket Sport 3S, 11.1V 3500mAh	ORI14192

4300mAh | 11.1V | 3S

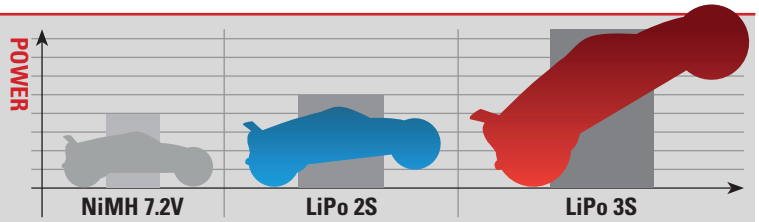
Fahrzeit
Power

Uni Plug System	Rocket Sport 3S, 11.1V 4300mAh	ORI14191
TRX	Rocket Sport 3S, 11.1V 4300mAh	ORI14190
Deans	Rocket Sport 3S, 11.1V 4300mAh	ORI14189
Tamiya	Rocket Sport 3S, 11.1V 4300mAh	ORI14188

Features

- 3200mAh version, same size as regular stick battery, compatible with all cars.
- 3500-4300mAh version, for cars compatible with 3S LiPo batteries.
- 50% more powerful and 35% lighter than equivalent NiMH batteries.
- Longer run-times than equivalent NiMH batteries.
- Robust hard plastic case protects cells from dirt and damage.
- Available with Uni Plug System, TRX, Deans, Tamiya and EC3 compatible.

By using a LiPo battery instead of a NiMH battery, you can greatly increase the performance of your car. Using a 3S LiPo instead of a 2S Lipo again increases the performance by up to 50%. Before using a 3S LiPo battery you must consult your car's user manual and make sure that the ESC is compatible with 3S LiPo batteries.



HIGH-END 1/10 BRUSHLESS ESC

1/10 & 1/12 RACING ESC

ADVANCED UPDATABLE SOFTWARE

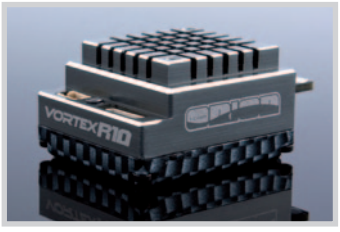
MACHINED ALUMINUM CASE

4 TIMES US NATIONAL CHAMPION

FULLY PROGRAMMABLE

The Vortex R10 range of ESC has taken the world by storm! All over the planet, racers are praising it's performance, smoothnes and tunability. The new generation of ESC has arrived, delivered by Team Orion!

Top of the range



Vortex R10 Pro 2-3S
ORI65102

High performance ESC featuring the latest developments in ESC technology. Its advanced software and timing functions maximise performance. It can run both in forward and reverse and with sensor or sensorless motors, making it not only the best racing ESC, but also the best all-around ESC. Works with 2-3S LiPo.

For 1/12 scale

Vortex R10 Pro 1-2S
ORI65101

The Vortex R10 Pro 1-2S is designed for 1/12 scale racing. It is equipped with a booster to allow the use of 1S LiPo and ensure high performance. The aluminum case is also thinner, reducing weight and lowering the CG even further. Thanks to its advanced and highly customizable software, this ESC is sure to give you an edge over the competition.

For 0° timing racing

Vortex R10 Race 2-3S (0°-Timing Class)
ORI65109

The newcomer in the R10 PRO ESC range, designed for 0° timing racing. This ESC uses the same software as the other R10 Pro ESC, but the timing functions have been disabled. It also works with sensor and sensorless motors, 2-3S LiPo and has forward/reverse function making it ideal for all applications requiring a high quality ESC.

Specifications	Vortex R10 Pro 2-3S	Vortex R10 Pro 1-2S	Vortex R10 Pro 2-3S
Rated current	160A/760A peak	120A/760A peak	90A/420A peak
Type	Sensor/Sensorless		
Function modes	Forward/Brake - Forward/Brake/Reverse - Forward/Reverse (Crawler)		
Timing boost	yes	yes	no
Motor type	2S: up to 2.5T, 3S up to 5.5T	1S: up to 3.5T, 2S up to 4.5T	2S: up to 5.5T, 3S up to 10.5T
Battery	5-9 NiMH/NiCd, 2-3S LiPo/LiFe	4-6 NiMH/NiCd, 1-2S LiPo/LiFe	5-9 NiMH/NiCd, 2-3S LiPo/LiFe
BEC	5.75V/3A, Linear	6V/2A, Booster	5.75V/3A, Linear
Size and weight	41.5x30.5x20.2mm, 44g	41.5x30.5x16.5mm, 40g	41.5x30.5x20.2mm, 43g

Features

- 4-times US national champion
- 2011 Norwegian Champion
- 3rd Place at the Worlds.
- Machined aluminum case for improved cooling
- Low center of gravity
- High grade components for unparalleled performance
- Highly customizable and updatable state of the art software
- Dual sensor port for optimal sensor wire placement
- Works with sensor and sensorless motors
- On the fly switch from sensor to sensorless mode in case of sensor failure
- Forward/brake, forward/brake/reverse and forward/reverse (Crawler) function modes
- Works with up to 3S LiPo (65102-65109)
- Easy setup
- Status control by LED and audio tone
- Optional programming box and software available

HIGH-END 1/8 BRUSHLESS ESC

1/8 SCALE RACING ESC

2-6S LIPO/LIFE 6-18 CELLS NIMH/NICD

180A CONSTANT 950A MAX!

ADVANCED UPDATABLE SOFTWARE

FOR SENSOR AND SENSORLESS MOTORS

The Vortex R8 Pro is at the peak of 1/8 ESC technology, high power, high efficiency, advanced customizable software, works with sensor and sensorless motors, US National champion, what else can you ask for?

2011 1/8 SCALE BUGGY AND TRUGGY NATIONAL CHAMPION

The Vortex R8 Pro Brushless ESC is designed for racers and those that want the best there is. It has a 950A peak current and advanced software that allows it to achieve max performance in allconditions.

Specifications	Vortex R8 Pro
Part#	ORI65105
Rated current	180A/950A peak
Type	Sensor/Sensorless
Resistance	0.0002 Ω
Function modes	Forward/Brake - Forward/Brake/Reverse Forward/Reverse (Crawler)
Motor type	4S: up to 3000KV, 6S up to 2400KV
Battery	6-18 NiMH/NiCd, 2-6S LiPo/LiFe
BEC	5.75V/3A, Linear
Size and weight	56x46.5x35mm, 105g

Features

- 2011 1/8 Scale Buggy and Truggy National Champion
- Robust carbon look plastic case with integrated cooling fan
- High grade components for unparalleled performance
- Highly customizable and updatable state of the art software
- Works with sensor and sensorless motors
- On the fly switch from sensor to sensorless mode in case of sensor failure
- Forward/brake, forward/brake/reverse and forward/reverse (Crawler) function modes
- Easy setup
- Status control by LED and audio tone
- Equipped with Deans high current connectors
- Works with up to 6S LiPo
- Optional programming box and software available

NEW GENERATION FAIR PRICE

- 4-POLE SENSORLESS BRUSHLESS SYSTEM
- 3 DIFFERENT WINDS AVAILABLE
- NEW GENERATION ESC
- PLUG&PLAY NO SOLDERING REQUIRED
- HIGH GRADE SILICONE WIRES

The Neon Brushless System sets a new standard for entry level brushless systems. A reliable new generation ESC, combined with a new 4-pole sensorless brushless motor!

ESC

The 4-pole Neon brushless combos use our new generation Vortex R10 ESC. This new ESC offers ease of use, reliability and high performance. It can work with up to 3S LiPo and comes with Tamiya or Deans connectors (depending on the motor type). Several paramaters can be fine tuned by the user.

MOTOR

The Neon 4-pole brushless motor is a brand new design from our motor man Oscar Jansen. The best technical choices have been made to offer great functionality with contained costs. Thanks to this you can enjoy the performance of a 4-pole motor without breaking the bank.

Features

- Vortex world champion technology
- Optimal ESC/motor combinations
- 3 different winds available
- Designed for 1/10 scale on-road and off-road cars
- 4-pole sensorless brushless motor with rebuildable case
- New generation 45A/290A Vortex R10 Sport ESC
- Several adjustable settings
- Forward/brake and forward/brake/reverse function modes
- Available with Deans or Tamiya plugs (depending on motor type)
- Works with up to 3S LiPo
- Cooling fan included
- Low voltage cut-off system for battery protection
- High grade silicone wire
- Gold connectors
- Easy setup
- Status control by LED and audio tone
- Plug&Play no soldering required

14T/4100KV Combo

Runtime
Power

ESC w/Deans battery connector
Vortex Neon 14T 4100KV Brushless Combo
ORI66082

Model	Neon 14 BL Motor
Part #	ORI28182
Turns	2Y
Resistance	6.06 mΩ
RPM/V	4100 KV
Current@7.2V	6.3 A
Voltage	4.5V-12.6V
Max. Power	250W
Efficiency	89%
Max. Temp.	150°C
Dimensions	L52 x D35.8mm
Shaft	L15 x D3.175mm
Connector	3.5mm Gold Plug

17T/3280KV Combo

Runtime
Power

ESC w/Deans battery connector
Vortex Neon 17T 3280KV Brushless Combo
ORI66083

Model	Neon 17 BL motor
Part #	ORI28183
Turns	2.5Y
Resistance	9.42 mΩ
RPM/V	3280 KV
Current@7.2V	4.1 A
Voltage	4.5V-12.6V
Max. Power	220W
Efficiency	90%
Max. Temp.	150°C
Dimensions	L52 x D35.8mm
Shaft	L15 x D3.175mm
Connector	3.5mm Gold Plug

19T/2750KV Combo

Runtime
Power

ESC w/Tamiya battery connector
Vortex Neon 19T 2750KV Brushless Combo
ORI66084

Model	Neon 19 BL motor
Part #	ORI28184
Turns	3Y
Resistance	14.51 mΩ
RPM/V	2750 KV
Current@7.2V	3.1 A
Voltage	4.5V-12.6V
Max. Power	180W
Efficiency	90%
Max. Temp.	150°C
Dimensions	L52 x D35.8mm
Shaft	L15 x D3.175mm
Connector	3.5mm Gold Plug

Motors

ORI28182 Vortex Neon 14T 4100KV Brushless Motor
ORI28183 Vortex Neon 17T 3280KV Brushless Motor
ORI28184 Vortex Neon 19T 2750KV Brushless Motor

ESC

ORI65106 Vortex R10 Sport 45A w/Tamiya connector
OR65110 Vortex R10 Sport 45A w/Deans connector

BRUSHED TECHNOLOGY
MODIFIED MOTORS

BRUSHED MODIFIED MOTOR

ADJUSTABLE TIMING AND REBUILDABLE

4 WINDS AVAILABLE

EASY SOLUTION TO IMPROVE PERFORMANCE

Features

- High performance modified brushed motor
- High quality motor can
- Improved cooling
- Fully rebuildable
- Adjustable timing
- Easy to replace brushes and springs
- 4 different winds available, 12T, 15T, 17T and 20T.
- Easy way to vastly improve your car's performance (on-road and off-road applications)
- Team Orion racen proven techonology
- Bullet type connectors

The Method Pro motors is the new generation of Method motors. Team Orion's world championship winning technology is built into these cost friendly motors. Installing a Method motor in your car is the easiest way to improve its performance and have more fun when you are running it. The motors can be rebuilt and the brushes replaced easily.

Runtime
Power

Method Pro 12 Turns
ORI25126

Runtime
Power

Method Pro 15 Turns
ORI25127

Runtime
Power

Method Pro 17 Turns
ORI25128

Runtime
Power

Method Pro 20 Turns
ORI25129

SHORT COURSE RACING MOTOR

550 SIZE SENSOR BRUSHLESS MOTOR

VORTEX WORLD CHAMPION TECHNOLOGY

2 PIECE CASE DESIGN

DESIGNED FOR SHORT COURSE RACING

HIGH PERFOMANCE AND RELIABILITY

Team Orion's Vortex motor technolgy now also available for Short-Course racing. Like all our Vortex racing motors this 550 size sensored brushless motor has been developed using the input from our world championship winning team.

Vortex VST Pro SC550 4.0T
ORI28240

The Short Course category has become a popular racing class. Thanks to this popularity, the cars have evolved, increasing the performance levels and allowing the use of more powerful motors and batteries. As with all Vortex racing brushless motors, the 550 size VST Pro SC

Vortex VST Pro SC550 4.5T
ORI28241

550 has been extensively tested by our world championship winning team. This ensures that you get a motor that has all the right characteristics to give you an edge over the competition. This motor has the same features as our 540 size VST Pro motors, but it uses a longer can,

Vortex VST Pro SC550 5.0T
ORI28242

longer magnet for extra torque and a 5mm shaft. Available with 4.0, 4.5 and 5.0 winds.

Weight	265g
Lenght	65.9mm
Diameter	35.8mm
Shaft size	20.8mm x 5mm
Shaft diameter	5.0mm

Specifications	VST Pro SC550 4.0T	Vortex VST Pro SC550 4.5T	Vortex VST Pro SC550 5.0T
Part#	ORI28240	ORI28241	ORI28242
Voltage	7.2-11.1V	7.2-11.1V	7.2-11.1V
RPM/7.4V	33'400	31'000	27'700
RPM/V	4'600KV	4'200KV	3'700KV
Max Power	800W	750W	700W
Max current	80A	70A	60A
Efficiency	86%	87%	88%
Magnet Material	Sintered	Sintered	Sintered
Type	Sensor	Sensor	Sensor
Timing	Adjustable	Adjustable	Adjustable
Poles	2	2	2

Features

- 550 size sensor brushless motor for short course racing trucks
- Rebuildable 2 piece motor can design
- Optimised sensor - rotor - stator positioning for improved efficiency and lower heat build-up
- New stack design for improved efficiency
- New cooling vent design for improved cooling
- Extra thick front plate for better stability and cooling
- Extra thick solder posts for improved contact and stability
- Removable sensor plate with high speed ballbearing
- New design gold plated wind ring
- Reduced vibrations
- Designed in Switzerland

BRUSHLESS FOR ALL APPLICATIONS

Combos and ESC for 1/8 scale cars

Vortex R8

Performance: **RACE**

Type	Combos
Sensor/Sensorless: ORI65107	**2050KV 4-Pole Motor** Vortex R8 (ORI65104) } ORI66091
Sensorless only: ORI65104	

Specifications

Rated current	130A/760A peak
Resistance	0.0004 ohm
Function modes	Forward/brake, forward/brake/reverse, forward/reverse (for Crawler)
Motor type	2S Lipo: up to 6000KV, 3S Lipo: up to 4000KV 4S LiPo: up to 3000KV
Battery	2-4S LiPo/LiFe or 6-12 cells NiMH/NiCd
BEC	6V/3A
Size	53.5x36x36mm
Weight	79g

Vortex R8 Pro

Performance: **PRO**

Type	Combos		
Sensor/Sensorless: ORI65105	**Vortex MR8 1750KV** ORI65105 R8 Pro } ORI66060	**Vortex MR8 2400KV** ORI65105 R8 Pro } ORI66063	**Vortex MR8L 1950KV** ORI65105 R8 Pro } ORI66066
	Vortex MR8 1950KV ORI65105 R8 Pro } ORI66061	**Vortex MR8L 1500KV** ORI65105 R8 Pro } ORI66064	**Vortex MR8L 2100KV** ORI65105 R8 Pro } ORI66067
	Vortex MR8 2150KV ORI65105 R8 Pro } ORI66062	**Vortex MR8L 1750KV** ORI65105 R8 Pro } ORI66065	**Vortex MR8L 2400KV** ORI65105 R8 Pro } ORI66068

Tech specs on page 7

Combos and ESC for 1/10 and 1/12 scale cars

Vortex R10 Sport | For 1/10 scale cars

Performance: **HOBBY**

Type	Combos
45A | Tamiya plug: ORI65106	**Neon 14T Motor** Vortex R10 Sport (ORI65110) } ORI66082
45A | Deans plug: ORI65110	**Neon 17T Motor** Vortex R10 Sport (ORI65110) } ORI66083
60A | Deans plug: ORI65111	**Neon 19T Motor** Vortex R10 Sport (ORI65106) } ORI66084

Specifications

Rated current	45A/290A peak
Function	Forward/brake, forward/brake/reverse
Motor type	2S Lipo On-Road: up to 6000KV 2S Lipo Off-Road: Up to 4000KV 3S Lipo On-Road: up to 4000KV 3S Lipo Off-Road: up to 2500KV
Battery type	2-3S LiPo/LiFe or 4-9 cells NiMH/NiCd
BEC	6V/3A
Size	31.5x27.5x33mm
Weight	74g

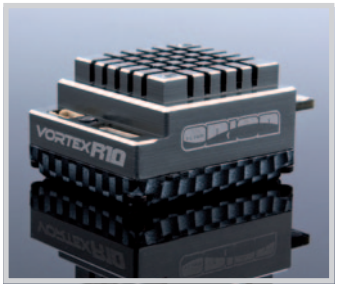
Vortex R10SC | For Short Course

Performance: **RACE**

Type	Combos
Sensor/Sensorless: ORI65108	**SC550 Motor 4.0T** Vortex R10 S SC (ORI65108) } ORI66088
Sensor only: ORI65103	**SC550 Motor 4.5T** Vortex R10 S SC (ORI65108) } ORI66089
	SC550 Motor 5.0T Vortex R10 S SC (ORI65108) } ORI66090

Specifications

Rated current	100A/520A peak
Resistance	0.0007 ohm
Function modes	Forward/brake, forward/brake/reverse, forward/reverse (for Crawler)
Motor type	2S Lipo: up to 6000KV 3S Lipo: up to 4000KV
Battery type	2-3S LiPo/LiFe or 6-9 cells NiMH/NiCd
BEC	6V/3A
Size	53.5x36x36mm
Weight	74g



Vortex R10 Pro | For 1/10 and 1/12

Performance: **PRO**

Type	Combos		
Full spec | 2-3S: ORI65102	**Vortex VST Pro 17.5T** ORI65101 R10 1-2S } ORI66050	**Vortex VST Pro 7.5T** ORI65102 R10 2-3S } ORI66053	**Vortex VST Pro 3.5T** ORI65101 R10 1-2S } ORI66071
Full spec| 1-2S: ORI65101	**Vortex VST Pro 13.5T** ORI65101 R10 1-2S } ORI66051	**Vortex VST Pro 5.5T** ORI65102 R10 2-3S } ORI66054	**Vortex VST Pro 6.5T** ORI65102 R10 2-3S } ORI66072
0° timing spec| 2-3S: ORI65109	**Vortex VST Pro 10.5T** ORI65101 R10 1-2S } ORI66052	**Vortex VST Pro 3.5T** ORI65102 R10 2-3S } ORI66055	**Vortex VST Pro 8.5T** ORI65102 R10 2-3S } ORI66073
			Vortex VST Pro 17.5T ORI65102 R10 2-3S } ORI66074

Tech specs on page 6

CRF TECHNOLOGY: THE EVOLUTION !

WORLD CHAMPION CRF TECHNOLOGY

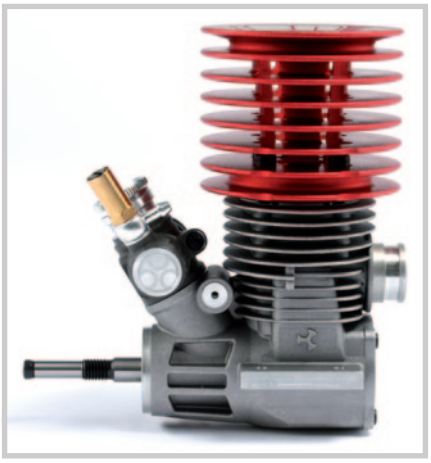
2012 VERSION

MAJOR EVOLUTIONS

3 PORT DESIGN

MADE FOR 1/8 BUGGY

The world championship winning CRF technology is patented by and found only in Team Orion engines. Our nitro R&D manager Adrien Bertin and our racing team continuously test new designs to make sure we keep an edge over the competition.



ORI80690 CRF B321 Racing Team Buggy

CRF Technology and high quality components at an entry level price. This is the CRF B321 Team buggy engine, fast, reliable and easy to tune!

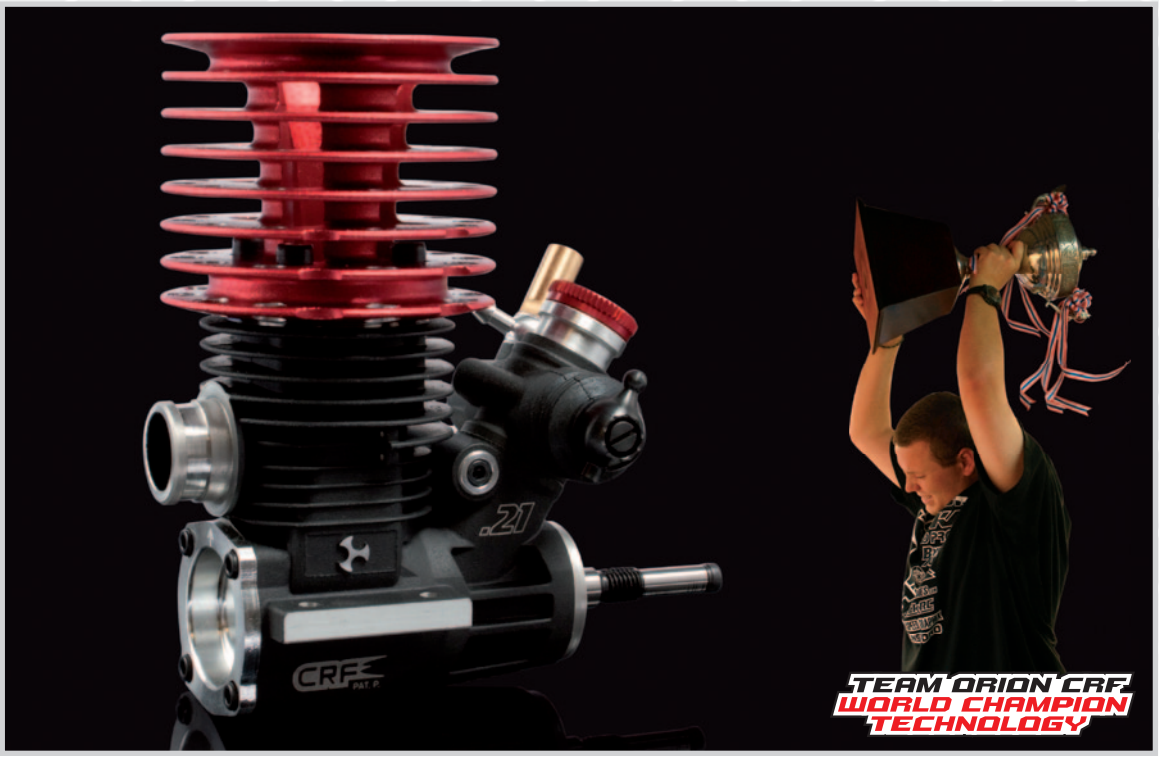
Specs	CRF B321 Racing Team Buggy
Part#	ORI80690
Type	2 stroke
Displacement	3.5cc
Bore	16.2mm
Stroke	16.9mm
Weight	350g
RPM	35'000
HP	2.7
Front Bearing	7x19x6mm Swiss
Rear Bearing	14.2x25.3x6.3mm Ceramic
Liner	ABC Precision Liner
Ports	5
Carburetor	2 needle aluminum carburetor
Crankshaft	patented SG type crankshaft

The patented CRF technology (EP 1 787 018) was created by inventor Fabrice Ramella and is in constant evolution thanks to Adrien Bertin. The main difference with standard engines resides in the crankshaft design:
1. Turbo-Effect thanks to the angled crankshaft port. 2. Reduced back plate mixture bouncing. Fresh fuel mixture is distributed around the backplate instead of bouncing against it. 3. Acceleration and throttle response is improved thanks to the slots which recover stagnating fuel mixture.

Features

- World championship winning technology
- 2012 version with major evolutions
- High grade components
- 3 ports design
- Steel bearings
- Friendly price
- Designed for 1/8 buggy

THE WORLD CHAMPION: NOW EVEN BETTER



WORLD CHAMPION CRF TECHNOLOGY

2012 VERSION

MAJOR EVOLUTIONS

FACTORY TUNED PARTS

MADE FOR 1/8 BUGGY AND TRUGGY

The world champion CRF engine has gotten even better. Throughout 2011 our team has been busy improving the CRF engine and the 2012 Factory Team engines are the result.

CRF B321 3.5ccm
Factory Team Buggy

- 3 port buggy engine
- Factory Team Tuning

CRF B321 Factory Team Buggy 3.5ccm
ORI80691

CRF B521 3.5ccm
Factory Team Buggy

- 5 port buggy engine
- Factory Team Tuning

CRF B521 Factory Team Buggy 3.5ccm
ORI80692

CRF T522 3.6ccm
Factory Team Truggy

- 5 port truggy engine
- Factory Team Tuning

CRF T522 Factory Team Truggy 3.6ccm
ORI80693

Specs	CRF B321 Factory Team Buggy	CRF B521 Factory Team Buggy	CRF B522 Factory Team Truggy
Part#	ORI80691	ORI80692	ORI80693
Type	2 stroke	2 stroke	2 stroke
Displacement	3.5cc	3.5cc	3.6cc
Bore	16.2mm	16.2mm	16.3mm
Stroke	16.9mm	16.9mm	17.1mm
Weight	350g	350g	350g
RPM	35'000	36'000	36'000
HP	2.7	2.8	2.8
Front Bearing	7x19x6mm Swiss	7x19x6mm Swiss	7x19x6mm Swiss
Rear Bearing	14.2x25.3x6.3mm Ceramic	14.2x25.3x6.3mm Ceramic	14.2x25.3x6.3mm Ceramic
Liner	ABC	ABC	ABC
Ports	3	5	5
Carburetor	2 needle aluminum carburetor	2 needle aluminum carburetor	2 needle aluminum carburetor
Crankshaft	patented SG type crankshaft	patented SG type crankshaft	patented SG type crankshaft

Features

- World champion
- National champion
- 2012 version with major evolutions
- New crankcase with stronger design
- New piston/liner with new piston material for improved power and durability
- New, light weight crankshaft design for improved RPM
- Factory tuned parts for optimized mixture flow
- 3 port version for smooth power and best run-times
- 5 port version for maximum power
- 5 port .22 size truggy version
- High grade components
- Rear ceramic bearing
- Double sealed front Swiss bearing
- New carburetor for improved tunability
- Made in Italy

NEW GENERATION ON-ROAD ENGINES

HIGH END RACING ENGINES

2012 VERSION

MAJOR EVOLUTIONS

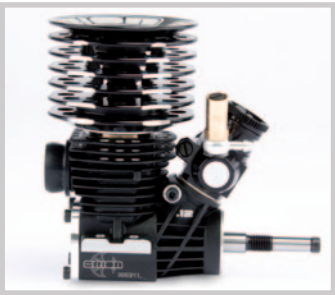
FACTORY TUNED

CERAMIC BEARING

Adrien Bertin is a two times on-road world champion, he knows that on-road racing pushes engines to the limit and that it's a great platform for engine development.

CRF R12 2.11ccm Factory Team On-Road

- 1/10 On-Road Engine
- Factory Team Tuning



CRF R12 Factory Team On-Road 2.11ccm
ORI80689

CRF R21 3.5ccm Factory Team On-Road

- 1/8 On-Road Engine
- Factory Team Tuning

CRF R21 Factory Team On-Road 3.5ccm
ORI80688

Specs	CRF R12 Factory Team On-Road	CRF R21 Factory Team On-Road
Type	2 stroke	2 stroke
Displacement	2.11cc	3.5cc
Bore	13.7	16.2
Stroke	13.8	16.9
Weight	227g	340g
RPM	39'500	39'500
HP	1.7	2.9
Front Bearing	Swiss	7x19x6mm Swiss
Rear Bearing	Ceramic	14.2x25.3x6.3mm Ceramic
Liner	ABC	ABC
Ports	3	7
Carburetor	2 needle aluminum carburetor	2 needle aluminum carburetor
Crankshaft	SG Balanced	SG Balanced

For 2012 we have two new on-road engine. Our R&D team has been busy throughout the year testing and improving all the aspects of the engines. The result is 2012 spec engines built using new components offering a vast array of improvement over 2011 engines. Better performance, better tuneability, better stability, the 2012 engines have it all.

ABC insert of the CRF R21 on-road engine

The crankshaft of the CRF R12 engine

Features

- National champion
- 2012 version with major evolutions
- Meets 2012 regulations
- New crankcase with stronger design
- New piston/liner with new piston material for improved power and durability
- Latest case alloy technology
- New, light weight crankshaft design for improved RPM
- Factory tuned parts for optimized mixture flow
- High grade components
- Rear ceramic bearing
- New carburetor for improved tunability
- Made in Italy

STARTER BOX PRO 2.
THE EVOLUTION.

- NEW 775 SIZE MOTORS OPTMIZED FOR LIPO
- NEW SWITCHING SYSTEM
- NEW UNIVERSAL BATTERY HOLDER
- FOR OFF-ROAD AND ON-ROAD CARS
- ROBUST AND LONG LIFE CONSTRUCTION

Our popular starter boxes have evolved, new lipo optimized motors, new switching system, new universal battery holder, a wide range of improvements that make a good product even better.

Starter Box Race 2

- Robust plastic case
- New 775 size motors optimized for LiPo
- New universal battery holder fits all battery types
- New improved switching system
- For On-Road and Off-Road cars
- Long life components
- Race tested

Off-Road Race 2 Starter Box
ORI88954

Starter Box Pro 2

- High end metal case
- New 775 size motors optimized for LiPo
- New universal battery holder fits all battery types
- New improved switching system
- For On-Road and Off-Road cars
- Long life components
- Race tested

Off-Road Pro 2 Starter Box
ORI88955

NiMH Stick

LiPo Stick

LiPo Square

LiPo Glow - the best tool for starting your engines!

The new LiPo Glow plug igniter uses a LiPo battery as a power source, this offers several advantages over NiMH batteries.

- Optimal power output thanks to the integrated power regulator (no voltage drop).
- Very low self-discharge, the igniter does not discharge by itself when it's not in use.
- Status LED indicates igniter and glow plug status.

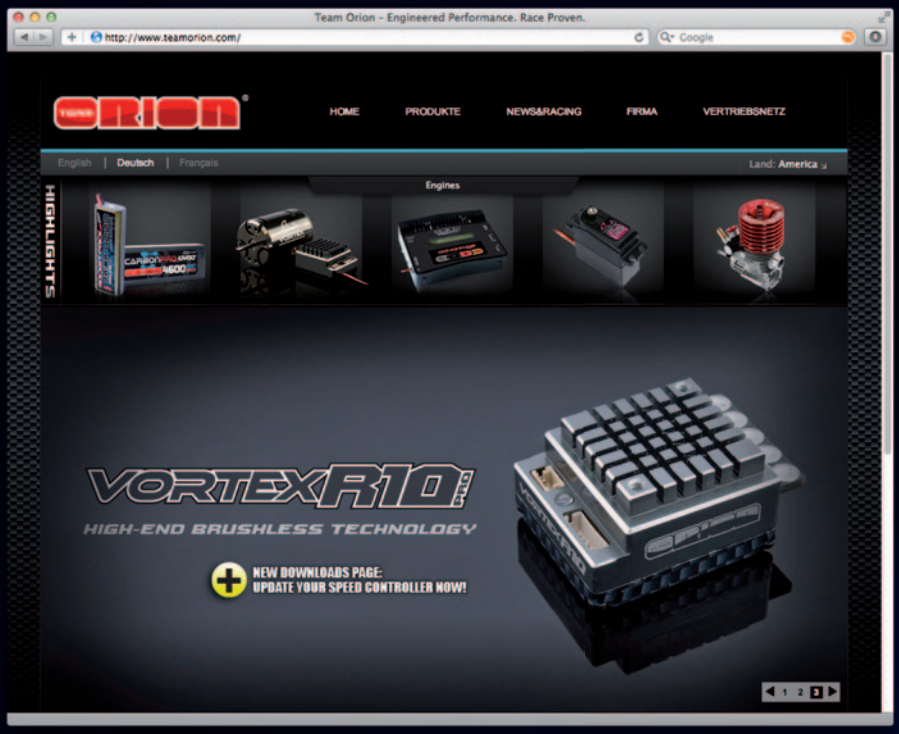
LiPo-Glow w/charger:
ORI88940 EU-220V, **ORI88941** UK-220V, **ORI88942** USA/JP-110V
LiPo-Glow only: **ORI88943** LiPo-Glow

The new starter boxes are compatible with round or square case NiMH and LiPo batteries. The switching system has been redesigned to ensure maximum reliability.

25 YEARS OF SUCCESS

WORLD CHAMPIONSHIP TITLES

- ★ 2011 Finland Ryan Cavalieri 1/10 Buggy 4WD, Motor, Batteries
- ★ 2011 Finland Ryan Cavalieri 1/10 Buggy 2WD, Motor, Batteries
- ★ 2010 Thailand Cody King 1/8 Buggy, CRF Engines
- ★ 2006 Italy Andy Moore 1/10 Touring V2 Motor, Batteries
- ★ 2004 USA Marc Rheinard 1/10 Touring V2 Motor, Batteries
- ★ 2001 South Africa Jukka Steenari 1/10 Buggy 4WD Motor, Batteries
- ★ 1999 Finland Jukka Steenari 1/10 Buggy 4WD Motor, Batteries
- ★ 1996 USA Mike Swauger 1/10 On-Road, Batteries
- ★ 1995 Japan Matt Francis 1/10 Buggy 2WD, Batteries
- ★ 1995 Japan Mark Pavidis 1/10 Buggy 4WD, Batteries
- ★ 1994 Germany Masami Hirosaka 1/10 On-Road, Receiver Batteries
- ★ 1994 France David Spashett 1/12th On-Road, Batteries



The Team Orion started 25 years ago. Originally Team Orion was a battery matching company, providing drivers all over the world with the best quality matched batteries on the market. 25 years and 12 world championship titles later, Team Orion has grown to be a company offering a wide array of products, powering electric and nitro cars alike.

Passion, quality and performance are three words that stand at the heart of the Team Orion brand. Our R&D team is constantly working on new designs and this shows in all of our products. Whether you are a racer or a just someone who enjoys running RC cars for fun, you are sure to find a Team Orion quality product that satisfies your needs. Team Orion means world champion technology and performance from every one of our products.

Team Orion - 25 years of success

WWW.TEAMORION.COM

facebook

VISIT US ON FACEBOOK!

WWW.FACEBOOK.COM/TEAMORION

Your local dealer:

Team Orion Europe SA • 31 Chemin du Pré-Fleuri • CH-1228 Plan-les-Ouates
Tel: +41-22-706-18-60 • Fax: +41-22-757-41-86

Technical specifications may change without prior notice
Copyright © 2012 Team Orion • Printed in Germany • ORI43923

7 612888 439235

Traxxas®TRX® High Current Connectors US Patent Nos. 7,374,460, 7,530,855, D573,536 and D576,557; Traxxas and TRX are registered trademarks of Traxxas, L.P. | Deans® and Ultra Plug® are registered trademarks of W.S. Deans Co. U.S. Patent No, 5,533,915 | Venom™ and Uni Plug System™ are trademarks of Venom. | Team Orion®, Alpha™, Avionics™, CRF™, Experience™, Rocket™, Vortex™ are registered trademarks of Team Orion Europe SA. All other trademarks are the property of their respective owners.